UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/828,997	04/09/2001	Zion Azar	127/02185	1331

44909 7590 07/17/2007

WOLF, BLOCK, SCHORR & SOLIS-COHEN LLP
250 PARK AVENUE
NEW YORK, NY 10177

EXAMINER
JOHNSON III, HENRY M

ART UNIT	PAPER NUMBER
3739	

MAIL DATE	DELIVERY MODE
07/17/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/828,997	AZAR, ZION	
	Examiner	Art Unit	
	Henry M. Johnson, III	3739	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 November 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *3,5-7,10,14,15,23,24 and 29-42* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *23, 29/23, 30/23, 32/23, 33/23, 34/23, 37/23, 38/23 and 39/23* is/are allowed.

6)☒ Claim(s) *3, 5-7, 10, 14, 24, 29/3, 29/10, 29/24, 29/41, 30/3, 30/10, 30/14, 30/24, 30/41, 31, 33/3, 33/5, 33/6, 33/14, 33/24, 34/3, 34/5, 34/6, 34/10, 34/24, 35, 36, 37/3, 37/5, 37/6, 37/10, 37/14, 37/24, 38/3, 38/5, 38/6, 38/10, 38/14, 38/24, 40/3, 40/5, 40/6, 41, 42/5, 42/6, 42/10, 42/14 and 42/24* is/are rejected.

7)☒ Claim(s) *39/3, 39/5 and 39/6* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *09 April 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *122006*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Response to Arguments

Applicant's arguments filed November 30, 2006 have been fully considered but they are not persuasive. Chen et al. as used in prior rejections clearly discloses heating in the methods cited in the application. Anderson et al., in the paper disclosed in the Applicant's background written in 1983, discloses the temperatures at which tissue exhibits various properties associated with treatment. Rejections based on Chen et al. and Anderson et al. follow.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 29/41, 30/41, 32/41, 33/41, 34/41, 37/41, 38/41, 39/41, 40/41, 41 and 42 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The term "substantially higher" is indefinite.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 3, 10, 14, 24, 29/3, 29/10, 29/24, 29/41, 33/3, 33/14, 33/24, 34/3, 34/10, 34/24, 37/3, 37/10, 37/14, 37/24, 38/3, 38/10, 38/14, 38/24, 40/3, 41, 42/10, 42/14 and 42/24 are

rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over U.S. Patent 5,814,008 to Chen et al. Chen et al. teach a method of treating tissue using two energy sources, one to heat the treatment site to enhance the perfusion of a photoreactive reagent into the tissue and the other source being a light with a waveband that overlaps that of the absorption of the reagent to effect photo treatment (Col. 2, lines 55-67). The initial heat is clearly prior to the photoactivation of the reagent. It is well known that the targeting of a photosensitizing reagent heats the target tissue and since the reagent is selectively absorbed by the target, the target tissue is selectively heated to a higher temperature. Chen et al. disclose the energy source may be LEDs, laser diodes, electroluminescent devices, resistive filament lamps (broadband), or vertical cavity surface emitting lasers. The LEDs operating by pulses (Col. 8, lines 1-2) resulting in pulsed radiation.

Regarding claim 14, when using a broadband source, a skilled artesian would know to filter the radiation to obtain the wavelength absorbed by the reagent.

Regarding claim 15, flashlamps are a well-known source of broadband radiation widely used in the art.

Regarding claim 24, PDT is well-known for treating dermatological conditions such as acne, port wine stains and tattoo removal.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 5-6, 33/5, 33/6, 34/5, 34/6, 35, 36, 37/5, 37/6, 38/5, 38/6, 40/5, 40/6 42/5 and 42/6 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,814,008 to Chen et al. in view of Selective Photothermolysis: Precise Microsurgery by Selective Absorption of Pulsed Radiation, by R. Rox Anderson; John A. Parrish; Science © 1983 American Association for the Advancement of Science. Chen et al. are discussed above, but do not teach specific temperatures for the target tissue. Anderson et al. teach the treatment of tissue using pulsed radiation that is selectively absorbed causing localized heating. Anderson et al. disclose that when heating above 60 °C to 70 °C, structural proteins, including collagens are denatured, above 70 °C to 80 °C, nucleic acids are denatured and membranes become permeable and above 70 °C to 100 °C, coagulation necrosis results. Thus, one of skill in the art is able to use the teachings of Anderson et al. to select the desired results. It would have been obvious to one skilled in the art to use the temperatures as taught by Anderson et al. in the methods of Chen et al. to effect the desired treatment.

Claim 30/3, 30/10, 30/14, 30/24, 30/41, 31, 35 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,814,008 to Chen et al. as applied to claims 3, 10, 14 and 24, 34/3, 34/10, 34/24 above and further in view of Selective Photothermolysis: Precise Microsurgery by Selective Absorption of Pulsed Radiation, by R. Rox Anderson; John A. Parrish; Science © 1983 American Association for the Advancement of Science. It would have been obvious to one skilled in the art to use the temperatures as taught by Anderson et al. in the methods of Chen et al. to effect the desired treatment.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting

rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 3, 5-7, 10, 14, 24, 29-35, 37 and 40 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-5 and 8-12 of U.S. Patent No. 5,759,200. Although the conflicting claims are not identical, they are not patentably distinct from each other because the steps represent obvious changes in scope. The term further heating the target in the patent clearly indicates this step is after the heating of the general area and target.

Allowable Subject Matter

Claims 23, 29/23, 30/23, 32/23, 33/23, 34/23, 37/23, 38/23 and 39/23 are allowed.

Claims 39/3, 39/5 and 39/6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Henry M. Johnson, III whose telephone number is (571) 272-4768. The examiner can normally be reached on Monday through Friday from 6:00 AM to 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda C. Dvorak can be reached on (571) 272-4764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Henry M. Johnson, III
Primary Examiner
Art Unit 3739